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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,053	03/19/2004	Mitsuhiro Ichijo	740756-2718	7738
22204	7590	01/04/2006	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			PHAM, LONG	
			ART UNIT	PAPER NUMBER
			2814	

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

In light of the inadvertent omission of claims 1-6 in the rejection in the office action dated 06/16/05. The office action is being reissued.

Election/Restrictions

Applicant's election with traverse of claims 1-6, 7-15, 39-46, and 34-38 (these claims should have been included with this species) in the reply filed on 07/27/05 is acknowledged. The traversal is on the grounds that see the election of 07/27/05. This is not found persuasive because the defined species are patentably distinct that is the unpatentability of one species does not imply unpatentability of other species.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 7-15, 34-38, 39-46 as previously filed, and 63-71 and 72-79 as newly added, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. (US patent 6,781,162) in combination with Kihira et al. (US patent 6,631,022).

With respect to claims 1, 7, 8, 9, 13, 34, 39, 40, 41, 42, 63, 64, 65, 72, 73, 74, 69, and 78, Yamazaki et al. teach a film formation method comprising the steps of (see col. 26, lines 1-30 and associated figures):

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forming a first film (target silicon nitride) on internal portions of a chamber
113 ;

installing a substrate into the chamber after forming the first film; and
forming a silicon nitride protective film is formed over a surface of the
substrate by using the first film and a second gas of argon.

Yamazaki et al. teach forming the first film or target silicon nitride but fail
to teach that the formation is done using monosilane or disilane gas and
nitrogen.

Kihira et al. teach forming a silicon nitride using monosilane or disilane gas
and nitrogen. See col. 19, lines 20-25.

It would have been obvious to one of ordinary skill in the art of making
semiconductor devices to form the silicon nitride as taught by Kihira et al. to obtain
a stable silicon nitride at a low temperature. See col. 19, lines 20-25.

Further with respect to claim 72, Yamazaki et al. appear to fail to teach
forming a thin film transistor over a substrate, wherein the thin film transistor
comprises an active region and a gate electrode with a gate insulating film
interposed therebetween.

However, the formation of a thin film transistor over a substrate, wherein the
thin film transistor comprises an active region and a gate electrode with a gate
insulating film interposed therebetween is well-known.

Further with respect to claims 34 and 39, Yamazaki et al. further teach
forming a thin film transistor over a substrate, wherein the thin film transistor
comprises of an active region and a gate electrode with a gate insulating film
interposed therebetween. See fig. 1A.

With respect to claims 38 and 46, Yamazaki et al. further teach forming an
EL layer 201 and an electrode 200 or 202 over the silicon nitride film 204. See fig.
4A.

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With respect to claims 3, 11, 36, 44, 67, and 76, Yamazaki et al. fail to teach the substrate is made of glass or plastic material.

However, the formation of semiconductor devices on glass or plastic substrate is well-known.

With respect to claims 4, 12, 37, 45, 68, and 77, Yamazaki et al. teach forming the silicon nitride protective film by sputtering but fail to teach that the target silicon nitride film is formed by plasma CVD.

However, the formation of silicon nitride by plasma CVD is well-known.

With respect to claims 2, 10, 35, 43, 66, and 75, Yamazaki et al. fail to teach the range for the formation pressure of forming the silicon nitride.

However, it would have been obvious to one of ordinary skill in the art of making semiconductor devices to determine the workable or optimal value or range for formation pressure through routine experimentation and optimization to obtain optimal or desired device performance because it has been held that it is not inventive to discover the optimum or workable ranges of a result-effective variable within given prior art conditions by routine experimentation. See MPEP 2144.05.

With respect to claims 5, 14, and 70, Yamazaki et al. further teach forming a semiconductor device using the silicon nitride film as a protective film of a semiconductor element. See cols. 25 and 26 and associated figures.

With respect to claims 6, 15, and 71, Yamazaki et al. further teach that the semiconductor element is a thin film transistor. See fig. 1A and associated text.

Conclusion

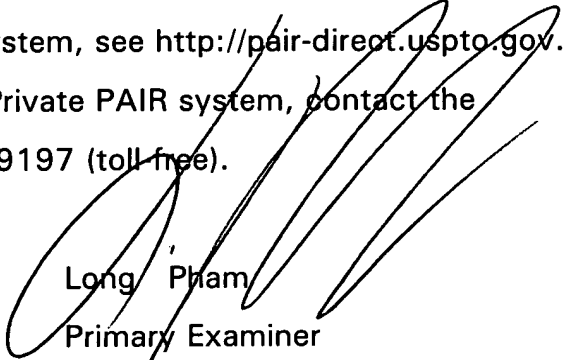
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Long Pham whose telephone number is 571-272-1714. The examiner can normally be reached on Mon-Frid, 10am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 571-272-1705. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).



Long Pham
Primary Examiner
Art Unit 2814

LP